#### SD EForm - 0499LD V5

FORM 2: Application for irrigation in South Dakota (type or print)

## FILE COPY

MEVLIVER

MAY 0 8 2023

OFFICE AID

MAY 0 8 2023

Ck# <u>2408</u> Rec't# 05-08-2

Mail to:

No. 8760-3 (office use only)
Hydrologic Unit 10170107

Basin Vermillion
Newspaper Vermillion Plain Tak (Fri) 424-2695

Ph. (605) 773-3352

No. 8760-3 (office use only)
Hydrologic Unit 10170107

Newspaper Vermillion Plain Tak (Fri) 424-2695

Vankton Daily Press & Dakotan 465-7811

|   | Tankton L                       | Daily 178334        | Dare a         | 1 665                      | - 1811         |                   | Rec'i                                    | 10500              |
|---|---------------------------------|---------------------|----------------|----------------------------|----------------|-------------------|--|--------------------|
| Applic                                    | ation For                       | r Permit            | To Ap          | propria                    | te Wat         | ter For 1         | [rrigation                               | ı                  |
| Type of Application:                      | New                             | Vested              | Right          | Amer                       | ndment/C       | orrection to      | Permit No                                |                    |
| Description of amendm                     | ent/correction                  | (Use predates l     | (5 72          | \ add divarrian            | noint(a) oban  | na usa ato )      |  |                    |
| escription of amendin                     | ient/correction                 | i. (i.e. change div | ersion point(s | ), add diversion           | point(s), chan | ge use, etc.)     |  |                    |
|   |                                 |                     | 500 = E        |                            |                |                   |  |                    |
| Name to Appear on                         |                                 |                     |                |                            |                |                   |  |                    |
| Note: The "Name to Ap                     | and the second of the second of |                     |                |                            |                | Secretary of      |  | =====              |
| Mailing Address 46003 Timber Rd (Address) |                                 |                     | . Vermillion   |                            |                | SD(State)         | (State) (Zip Code)                       |                    |
| Phone                                     |                                 |                     |                |                            |                |                   | notmail.co                               | m                  |
| . Amount of water cla                     |                                 | -                   | i most         | **GPM                      |                |                   | Total Acreag                             |                    |
| . Allount of water cit                    | (*Cubic Feet per S              | Second) (**Gal      | lons per Minu  | te) (***Acre               | Feet - storag  | e capacity of dar | n/dugout or annual                       | use if applicable) |
| Source of water sup                       | ply <u>Gr</u>                   | sand wo             | ter (1         | well)                      |                |                   |  |                    |
| . Location of point of                    | diversion                       | lapli in            | 5h             | INE TO<br>3 wells in SW1/4 | 13N            | R52W              | 524                                      |                    |
|   | ·                               | 10001111            | (example -     | 3 wells in SW1/4           | NE1/4 section  |                   |  |                    |
| 2   |                                 |                     | MINISTER       |                            |                |                   | County                                   |                    |
| County or counties                        | where water v                   | vill be used        | Clay           |                            |                |                   |  |                    |
| Annual period durin                       | ng which wate                   | r is to be used     | Ma             | 41 - 50                    | otem           | per 30            |  |                    |
| . List below each for                     | ty acre divisio                 |                     | raction the    | . 1                        | ow numbe       |                   | be irrigated in                          | ı each.            |
| Land D                                    | Description                     |                     | Acres          |                            | Lar            | d Description     | on                                       | Acres              |
| WNE TOWN                                  | RSaw                            | 524                 | 38             | NWSE                       | T93N           | B52W              | Say                                      | 37                 |
| ENE T93N                                  | 12                              | Say                 | 25             | NESE                       | T93N           | R5aW              | 524                                      | 16                 |
| WNE TOON                                  | R52W                            | 5 24                | 30             |                            |                |                   |  |                    |
| SENE TASH                                 | REAW                            | Say                 | 26             |                            |                |                   |  |                    |
| . Give a description of                   | of the project.                 | (Attach sheet       | t if more s    | pace is need               | led)           |                   | ar - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - |                    |
| well in SWNS                              | = TOZN                          | REDIN               | 524            | to supp                    | lu ina         | rer to a          | center                                   | i m                |
| Acout 111 Daalal                          | _ 173/                          | 17004               | 001            | 31-71                      | 0              |                   | acima b                                  | TUVIT              |
|   |                                 |                     |                |                            |                |                   |  |                    |
| 01.4                                      | 2                               |                     |                |                            |                |                   |  |                    |
| Batto                                     | Saa                             |                     |                |                            |                |                   |  |                    |

| Batto B Rrs          |   |
|----------------------|---|
| I, les Mark Botteton | Owner / Darther, the applicant, certify under |
| Name of Person       | Title (if applicable)                         |

penalty of perjury that I have read this application, examined the attached map, and that the matters stated are true. I further certify, if acting on behalf of an entity or individual other than myself, that I am authorized to submit this application.

Attachments: Attach Form 2A if diversion is from a well or dugout, or if storage of water is proposed. Also, attach map and any other technical information. (see instructions)

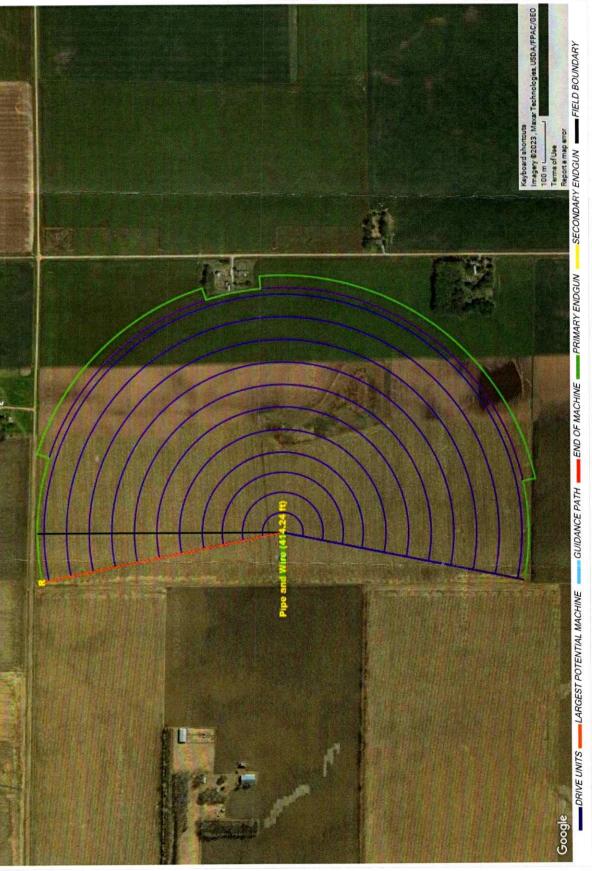
### **Supplemental Information**

(type or print)

| 1. Well Information (check one or both as applicable) \(\infty\) Drilling new  | well(s) Using existing well(s)   |
|--|--|
| a) If new wells, how many Have test holes been drilled \(\)\(\)Yes, ple  | es No Drilled by Heine Electric + Irrigation ase provide copies of logs) |
| b) If existing wells, how many Provide copy of log(s), if ava  |  |
| For either Existing or Proposed Wells:   |  |
| c) Well Depth (required) 2120 Depth to Top of Water Bearing  | Material <b>293</b> Depth to Water from Surface <b>210</b>               |
| d) Distance to nearest domestic well on applicant's property   | Property owned by others NO  |
| 2. Wastewater Disposal System Information  |  |
| a) Type of System (i.e. septic tank, drain field)  |  |
| b) System Capacity (gallons)   | Year Constructed   |
| c) Connected to the City of Sanitary   | System   |
| 3. Dugout Information  |  |
| a) Surface Dimensions  | Depth  |
| b) Depth to water (ground surface to water level)  |  |
| 4. Water Storage Dams  |  |
| If the proposed water use system contains one or more storage for each dam. The locations of the dams need to be shown on the storage of the dams need to be shown on the storage of the dams need to be shown on the storage of the st |  |
| <ul> <li>a) If a private engineering firm or government agency was<br/>name and address:</li> </ul>  | involved in the design of this dam, please give their                    |
| name and address.  | b) Freeboard   |
|  | c) Crest Width   |
|  | Crest Length   |
|  | d) Height  |
|  | e) Primary Outlet Capacity   |
| 1  | If pipe, diameter  |
|  | f) Secondary Spillway Capacity   |
| ▼ Water Surface b  | Spillway Width   |
|  | g) X & Y Slope (e.g. 3 to 1 is a typical slope)                          |
|  | Upstream   |
| ] x  | Downstream   |
|  | h) Surface Area of Impoundment   |
| e  | i) Storage Acre Feet   |
|  | j) Drainage Area Above Dam Acres   |



Map Summary Report - Bottolfson - West WW



HEINE ELECTRIC & IRRIGATION - 307 S. Robinson Ave, Hartington, NE, 68739-5139, United States



### SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

|   | MARK POTTOL FOOM                                      |  |  |  |  |  |
|---|---|--|--|--|--|--|
| Location SW ¼ NE ¼ Sec 24 Twp 93N Rg 52W  | Well Owner: MARK BOTTOLFSON                           |  |  |  |  |  |
|   | Business Name:  |  |  |  |  |  |
| County CLAY North   | Address: 46003 TIMBER RD                              |  |  |  |  |  |
| Please mark well  | City, State, Zip: VERMILLION SD 57069                 |  |  |  |  |  |
| iocation with an X  | WELL LOG: DEPTH                                       |  |  |  |  |  |
| w   | FORMATION FROM TO                                     |  |  |  |  |  |
| "   | TOP SOIL 0 3  |  |  |  |  |  |
| ļ <u>i</u>  | GLACIAL TILL 3 15                                     |  |  |  |  |  |
|   | GRAY SANDY CLAY 15 78                                 |  |  |  |  |  |
| Well Completion Date  | FINE GRAY SAND WITH CLAY 78 85                        |  |  |  |  |  |
| 4-28-2023 K 1 Mile  | FINE TO MEDIUM SAND 85 93                             |  |  |  |  |  |
| N I Wille — Y   | FINE TO MEDIUM SAND &GRAVEL 93 116                    |  |  |  |  |  |
| Distance to nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)? |   |  |  |  |  |  |
| ft. from(identify source  |   |  |  |  |  |  |
| PROPOSED USE:    Domestic/Stock   |   |  |  |  |  |  |
| Irrigation Industrial Institutional Monitoring well   | STATIC WATER LEVEL FEET                               |  |  |  |  |  |
| METHOD OF DRILLING:   | If flowing: closed in pressure PSI                    |  |  |  |  |  |
| ROTARY  | GPM flow through Inch pipe                            |  |  |  |  |  |
|   | Controlled by Valve Reducers Other                    |  |  |  |  |  |
| CASING DATA: Steel Plastic Other  | Reduced flow rate GPM                                 |  |  |  |  |  |
| If other describe  PIPEWEIGHT DIAMETER FROM TO HOLE DIAMETER                                  | Can well be completely shut in?                       |  |  |  |  |  |
| PIPEWEIGHT DIAMETER FROM TO HOLE DIAMETER  LB/FT IN FT FT 5.25 IN                             |   |  |  |  |  |  |
| LB/FT IN FT FT IN   | WELL TEST DATA:                                       |  |  |  |  |  |
| LB/FT IN FT FT IN   | Pumped Describe:                                      |  |  |  |  |  |
| GROUTING DATA:  | Bailed  |  |  |  |  |  |
| Grout Type No. of Sacks Grout Weight From To Groutwell DF 65 Lb/gal 1 Ft 116 Ft               | Other   |  |  |  |  |  |
| Lb/gal Ft Ft  | Pumping Level Below Land Surface                      |  |  |  |  |  |
| Describe grouting procedure   | Ft. After Hrs. pumped GPM                             |  |  |  |  |  |
| TREMMIE   | Ft. After Hrs. pumped GPM                             |  |  |  |  |  |
| SCREEN:   | If pump installed, pump rate: GPM                     |  |  |  |  |  |
| SCREEN: Perforated pipe Manufactured  Diameter Inches Length Feet                             | REMARKS LATITUDE: 42 860020                           |  |  |  |  |  |
| Diameter Inches Length Feet Material  | LATITUDE: 42.860929<br>LONGITUDE: -96.9328            |  |  |  |  |  |
| Slot Size Set From Feet to Feet   | ELEVATION: 1196 JUL 0 6 2023                          |  |  |  |  |  |
| Other information   | OFFICE OF WATER                                       |  |  |  |  |  |
| WAS A BACKED OF OFAL HOEBS. TVos. TVos.   | This well was drilled under license # 810 and this    |  |  |  |  |  |
| WAS A PACKER OR SEAL USED? Yes No If so, what material?                                       | report is true and accurate.                          |  |  |  |  |  |
| Describe packer(s) and location   | Drilling firm: HEINE ELECTRIC & IRRIGATION, INC.      |  |  |  |  |  |
| 100 200   | Signature of License Representative:                  |  |  |  |  |  |
| DISINFECTION: Was well disinfected upon completion?  Yes, How?                                | Gave The  |  |  |  |  |  |
| Lab to which water No, Why Not? TEST HOLE   | Signature of Well Owner or Equitable Property Holder: |  |  |  |  |  |
| quality sample sent for analysis  |   |  |  |  |  |  |
|   | 7/  |  |  |  |  |  |
|   | Date: 7-6-23  |  |  |  |  |  |

# Heine Electric & Irrigation, Inc. TEST HOLE WELL LOG SUPPLEMENT

| Date:   | 4-78-                     | 23                   | 1531 (                        | IOLL VVELL    | <u>- rog 201</u>      | PLEMEN                  | Ţ             |            |                |             |
|---|---------------------------|----------------------|-------------------------------|---------------|-----------------------|-------------------------|---------------|------------|----------------|-------------|
| Name:<br>Address:   | May                       |                      | Holfsons                      |               |                       | _ PI                    | hone Numb     | er:        |                |             |
| City:   | Verni                     | 11:0~                | _State: <u>S</u>              | $\mathcal{D}$ | Zip:                  |                         |               |            | <u> </u>       | <del></del> |
| Legal Des   |                           |                      | NE 1/4                        |               |                       |                         | hip <u>93</u> | North      |                |             |
|   | ·                         | Range                | <u> </u>                      | st            | West                  | X                       | Clay          | County     | ′              |             |
| Latitude De<br>Longitude [<br>Elevation:<br>The well is             | _                         | feet from t          | Minute:<br>Minute:<br>the(N S |               | Second:<br>Second:    |                         | eet from the  | <br><br>'e | ]) section lir | ne.         |
| Location:   | 1-23                      |                      |                               |               |                       |                         |               |            | 1) accrion in  | · C.        |
| Depth<br>  From<br>  O'<br>  3'<br>  15'<br>  78'<br>  85'<br>  93' | To 3' 15' 78' 85' 93' 116 | Top<br>Glaci<br>Gran | Soil<br>al Till<br>1 Sandy    | Clay Sand     | or brown<br>d/heaving | /gravei/w<br>:)<br>.lsy | vater, or     | R          | ecomended:     | 96          |
|   |                           |                      |                               |               |                       |                         |               |            |                | Soli        |
|   |                           |                      |                               |               |                       |                         |               |            | []]]]]         | .050<br>20' |

307 S. Robinson Ave, Hartington, NE 68739 Phone: (402)254-2568 Fax: (402)254-2597 Email: heineelectric@hartel.net



Call us today for all your well service needs! Farm - Resdiential Sales - Service